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# MICHIGAN FARMER

## AND STATE JOURNAL OF AGRICULTURE.

JOHNSTONE & GIBBONS, Publishers.

DETROIT, TUESDAY OCTOBER 18, 1881.

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### Agricultural.

#### THE CANADA THISTLE.

At a recent meeting of the Markham (Ont.) Farmers' Club, the best method of destroying the Canada thistle was one of the subjects debated. As this pest is a fruitful source of annoyance in various parts of this State, we copy from the Toronto Globe the discussion relating to it, and the various means that have been used to exterminate it.

Mr. Wm. Ronnie gave his experience in getting rid of thistles on a farm once over-run with them. He said that when he first went on the place in spring he found it as full of thistles as it could be. The members of the club had that day walked over a part of his fallows where there was not a single thistle to be seen. He had killed every one of them by repeated cultivating, as he would afterwards explain. He and his gardener, Mr. Burgess, had started experimenting with thistles; had found that a dense shade would kill them; also that stripping the large leaves off would kill them, but that merely cutting the tops off would not. As the result of the experiments he had become fully satisfied that three or four cuttings just under the surface was sure death to thistles. So he purchased a new set of shovel teeth for his cultivator and ran that over the field. It cut the thistles and left them standing, but in a few hours they wilted beautifully and dropped. In ten days they were up again and received another dose of the cultivator. This time the thistles grew again, but weak and soft, and one more cutting finished nearly every one of them. He expected that a crop of barley and clover would spring off whatever seedlings might flourish from the seed left in the soil. For thistle land from which a grain crop had just been taken, he would first go over the ground with a grubber, to loosen it and give the weed seeds a chance to germinate. Then he would run his scuffler and cut off the weeds; let the seeds grow again and cut again. "One of the greatest mistakes a farmer could make was to plow under land foul with seeds without doing something to germinate the weeds. He thoroughly believed that plowing was of no good against thistles. Besides, the saving effected by using a cultivator instead of a plow was immense. A man can cultivate three times as much as he can plow. On the ordinary farm, in two or three days a cultivator will go over all the summer fallow there is. Any farmer can find time to do this, while farmers could not and did not find time to plow their fallows. So that even if plowing was as effectual as cultivating, which it is not, cultivating would be best.

Mr. Slater thought this was a new idea to most of them.

Mr. Lawson would be extremely glad if the plow would succeed, as he had plowed his fallows five times, and still there were thistles coming up among his wheat. He could easily cultivate eight acres a day.

Mr. Jennings could agree as to the efficacy of the system they had explained, on strong land. But he thought if the land was thus cropped every year, it would soon be in the condition of a man who had no rest. He had himself proved that cutting thistles would kill them. He always contended that in summer following the first plowing should be deep and the others very light. He saw on a visit to England a scuffler six or seven feet wide, which would do just the work wanted. Turnips succeeded well in land treated with such a scuffler. In the Genesee Valley the farmers plow but once, then gang-plow and cultivate, and they had cleaner farms than Canadians, though we thought ourselves such good farmers.

Mr. Gibson was quite sure that the attendance at these meetings was more profitable than putting aside all the work of the farm and teaming produce to Toronto, even at present prices. He thought there

were millions of dollars lost in Canada by teaming produce in at this time with dear labor rather than in winter. He was quite sure he could afford to take ten cents a bushel less for his wheat in winter rather than team it in now when there was so much necessary work to be done. His system of farming differed entirely from their hosts'. He quite agreed about the cutting of thistles to kill them. The deeper you plow land with thistles in it the better the thistles will thrive. Some farmers around here are keeping their thistles down by plowing shallow. This was death to the thistles but was not profitable to the crop. He did not believe in substituting roots for summer fallowing. Before the Agricultural Commission one witness said that roots were not exhaustive, and immediately afterwards that roots needed twenty large loads of manure to the acre. He did not see, if this was so, that roots could be grown without exhausting the soil. He should like to caution his brother farmers about the great change impending in our agriculture, consequent upon the opening up of the Northwest. We must hereafter raise better crops, must manure heavily, and subsoil. He could not see how the fertility of a farm could be kept up with a five year course, even if all the hay and coarse grain were consumed on the farm, unless by the help of purchased manure. He believed that artificial manure and the five year's course was the bottom of all the trouble with British agriculture. Such high pressure must result in failure.

Mr. Jennings spoke in favor of shallow plowing and stirring the subsoil without bringing it to the surface.

Mr. Dimmie had been much instructed by what had been said about thistles. Had tried plowing deeply to kill them, but without success.

Mr. McDonald said if somebody would be obliging enough to take his couch grass away he would willingly keep the thistles, as he was not afraid of them.

Mr. Jennie said a patch of couch among the thistles had been completely killed by the treatment the thistles got.

Mr. McDonald, continuing, said he was under the impression that summer fallowing robbed land of its fertility by preventing the escape of nitrogen; it also made a seed bed for the thistle seeds that were wafted from roadsides. Had a field which had not been summer fallowed for 21 years, and there was not a thistle on it.

#### MICHIGAN SHORTHORN BREEDERS' ASSOCIATION.

To the Editor of the Michigan Farmer.

It may be, that many of your readers, breeders of Shorthorn cattle and others, would like to hear more of the Association of breeders of Shorthorn Cattle, of which notice was given in your paper of Sept. 28th.

In the first place, due credit should be given to the editors of the FARMER for the suggestion of such organization at this time. Upon calling the attention of a few well known breeders they authorized the use of their names for a call which was duly made through the FARMER, for a meeting during the week of the State Fair.

This call was responded to with alacrity by breeders present at the Fair, and at the meeting held to consider the advisability of such an organization, a large attendance manifested the interest felt, and a constitution was adopted and officers elected, whose names were published in the FARMER, and perhaps I may be allowed to say that these, with two exceptions, are representative breeders from different part of the State.

As stated in the constitution, the object of the society is to promote the interests of breeders of Shorthorn cattle; but it is asked, what particular interests will it promote?

No exact plan of work has been adopted. The Board of Directors have held no meeting to form any plans, but there are many items in a general way which will suggest themselves to any one. In the first place there is no self interest to be fostered; The Association will work of the general good of the cattle interests of the State. Shorthorns at present outnumber all the other improved breeds in the State, while their grades are correspondingly numerous, and anything that will help Shorthorns will certainly advance the general cattle interest. "In union there is strength," not only in the combination of individual forces, but in this case in the increased interest which we expect to create, and the greater knowledge we expect to diffuse among the breeders. It will have a tendency to cultivate a social, friendly feeling among the breeders. An annual meeting will be held each winter for the friendly discussion of matters of interest among Shorthorn breeders. This will be invaluable to beginners, rescuing them from that "forty years in the wilderness" which an old breeder said he had been through till he found better systems and methods.

We expect to increase the knowledge of the valuable points of these cattle so that perfection will be the aim, thus leading to continual improvement; that is, we expect to improve the cattle as well as help the breeders.

The Association will probably become auxiliary to the American Association,

which includes the United States and Canada, and which will soon hold its ninth annual meeting—we shall thus be in communication with the leading Shorthorn breeders of America.

The programme for the first annual meeting, which will be held at Lansing on the 16th of December, is not fixed, but we intend to have, as the president says, a "rousing meeting," due notice of which will be given.

I hope every breeder in the State will take hold and join the association and attend the meeting at Lansing.

What I have written is my individual opinion or suggestion, as no plan has been officially adopted, I have given a short history of the organization, and a few suggestions which I have thought would be within the scope and work of the Association.

The following is a copy of the constitution and list of members thus far. All wishing to join will please correspond with Mr. B. J. Gibbons, the treasurer, at Detroit.

#### CONSTITUTION.

1st. This Association shall be called the Michigan Shorthorn Cattle Breeders' Association.

2nd. Its object shall be to promote the interests of breeders of Shorthorn Cattle in this State.

3rd. Its officers shall consist of President, Vice-President, Secretary and Treasurer, and an Executive Committee of five members, all of whom shall constitute a Board of Directors, who shall have charge of all the affairs of the Association.

The President shall be Chairman of the Board. The Secretary and Treasurer shall perform the duties of their offices under the direction of the Board of Directors.

4th. Any person may become a member of this Association by subscribing to this Constitution and paying the sum of one dollar annually.

All moneys of the Association shall be paid out only by appropriation of the Board of Directors, by order of the Secretary on the Treasurer, countersigned by the President.

5th. The annual meeting of this Association shall be held at such time and place as the Association may fix.

6th. The officers of this Association shall hold their offices for one year, or until others are selected or appointed in their places.

#### LIST OF OFFICERS.

President.—Wm. Ball, Hamburg.  
Vice-President.—Geo. W. Stuart, Grand Blanc.  
Secretary.—I. H. Butterfield, Port Huron.

Treasurer.—B. J. Gibbons, Detroit.  
Directors.—A. S. Brooks, Wixom; Thos. Birkett, Base Lake; H. H. Hinds, Stanton; A. F. Wood, Mason; John Moore, East Saginaw.

#### LIST OF MEMBERS.

Wm. Ball, John T. Rich, Geo. W. Stuart, H. Bishop, R. A. Remick, Townsend North, H. A. Wyckoff, Wm. B. Heart, Robert Gibbons, Geo. P. Chapman, I. H. Butterfield, Jr., H. C. Spencer, John Lester, Thos. Foster, Thos. Birkett, John Joy, A. S. Brooks, A. J. Scott, H. H. Hinds, D. P. Dewey, B. J. Gibbons, C. Hibbard, C. C. Cameron, Norman L. Miller, W. N. Brown, H. S. Brigham, John McKay, Amos F. Wood, Ezra Mead, Thomas Gundry.

#### A CANADIAN PRIZE FARM.

The Provincial Agricultural Society of Ontario offer a number of premiums on farms, and the committee on awards has recently finished the work of visiting and inspecting those entered for competition. From their report we get the following description of the farm awarded the gold medal, which will be found of much interest:

The farm contains 300 acres of a clay loam, with a clay subsoil. The system followed in its cultivation is that of mixed husbandry, consisting of grain growing, breeding of thoroughbred cattle and sheep and fattening stock. There were grown this year forty acres of fall wheat of the following varieties: Clawson, Scott, and Walker's Reliable. With the exception of the latter, the crop was below the average of former years: Thirteen acres of blue peas, fifteen acres of barley, 24 acres of corn, and three acres of soiling. The root crops consist of twelve acres of turnips, two of mangold and 34 of carrots, all extra good for the season. Mangolds are used for Spring feed, chiefly for cows after calving and for ewes, and carrots are fed pretty freely to horses. Forty acres were cut for hay and sixty pastured. The rotation followed is manure after sod, fall wheat on pea land manured, and on clover plowed under, as well as an occasional summer fallow with what manure can be spared from the root crop put on—fall wheat followed by oats, oat stubble heavily manured for turnips, then a crop of barley seeded down—manure in all cases plowed under. The stock of cattle is twenty-one Shorthorns, besides the bull now in use, a Bates. Twenty-five grades are also usually kept. In the system of winter feeding nearly all the fodder is passed through the chaff cutter. A flock of from thirty-five to sixty sheep are kept, one-third Shropshire Downs, the balance Leicesters, with a dash of Lincolns. The homestead, buildings and fences were found to be of a model character. The judges said that the owner brings intelligence and good judgment to bear in all that belongs to his management. Irrespective of size, they believe it to be the best-managed farm. The farm belongs to a Mr. Donaldson, and is situated in Oxford County.

#### POLLED CATTLE.

To the Editor of the Michigan Farmer.

DEAR SIR.—Seeing in your issue of October 4th, an article on Polled cattle, which is of importance to all cattle men, I beg to offer a few remarks on the article, and the various breeds of Polled cattle, which may be useful to those who think of embarking in their breeding, having had considerable experience in the grazing of both Polled and Shorthorn cattle in England. The writer of the article in *Country Gentleman* regarding the aged Polled cows, is pretty correct, as butchers in England will always give more per lb., even for an old Polled cow, properly fattened, than they will for an old Shorthorn cow, let her be ever so well finished. The writer has been often seen in the English markets the Aberdeen cows purchased at from 2 to 46 per lb. more than could be obtained for the best Shorthorn cows, and for the reason that the Aberdeen cow never gets patchy like the Shorthorns; but as for being dairy cattle, they are never classed among the dairy breeds. There are three distinct breeds of Polled cattle, the red-polled cattle of Norfolk and Suffolk; the Galloways of border counties of Scotland, that is, Dumfries and Wigtownshire, and Galloway and Kircubright counties, also Cumberland in England—in fact some of the best herds are to be found on the borders of Cumberland; the Angus or Aberdeens, bred principally in Forfar, Aberdeen, and Banffshires, although they are to be found in small numbers in other counties. The West Highland cattle are horned cattle bred in the North and West Highlands, and when fattened at four years old, there is no beef commands the same price in any market that they do.

The Galloway is a slow grazer, but very properly finished at four years old, is a very choice bit of beef; but, as the late Mr. McCombie said, very few men have the patience to put the finishing touch on a Galloway. I have seen some choice lots of Galloways at the great Christmas markets in London, grazed on the strong Essex marshes—that being about the only land strong enough to graze them properly, their coarse bone needing strong land to finish them. In the stall they are slow to put on beef alongside a common Shorthorn or Aberdeen beast. The red Norfolk is not so ill to fatten, but they don't bring the weight nor the price of the black cattle. The Angus or Aberdeens are quick feeders; as a rule they are finished off at three years old, and within the last ten years many a lot of them are finished at 30 months. It is one of the sights of the London Christmas market, the row after row of black cattle in the salesmen's hands. For an early feeder, (that is an animal that will reach maturity in flesh quick) and command the best price, a cross between an Aberdeen and Shorthorn is the best a grazer can get. It is a well known fact among both Scotch and English growers that you can graze 13 Aberdeen cattle on the same ground that will graze 10 Shorthorns only, of same age, and there would be a deal of difference in weight, beef for beef, and the black will always bring the best price per lb. to the butcher. I am certain that the Aberdeens, to grade up the common cattle both of Canada and the States, would be a step in the right direction, the same as grading up with the Shorthorn, but many of the farmers very slow to see what is to be to their advantage; but in a very few years cattle growing on this continent will be fully as profitable as wheat growing, and the rough and round way of feeding at present in use, will give way to a more systematic method, with less waste of feed. I will, at a future day, write again on the subject, and give a few notes of practical experience in the feeding of cattle, which may be of some use to your readers.

Yours truly, W. R. BEECH Co., Ontario.

#### THE HESSIAN FLY.

St. Johns, Mich., Oct. 10th, 1881.

To the Editor of the Michigan Farmer.

SIR.—In the FARMER of the 4th of this month you say in reply to Mr. Squire, that late sowing will prevent the ravages of the Hessian fly; but here is an exceptional case: In the fall of '79, about the middle of October, I thought my wheat destroyed by the fly, and I sowed a piece about the 20th, thinking at least that I would raise my bread and seed. It came up, but did not get much growth in the fall, and in the spring it was literally destroyed by the fly, so that I plowed it up; while my wheat sowed about the 10th of September, yielded 37 bushels to the acre. I have raised wheat about 40 years, and never had any destroyed by the Hessian fly sowed from the 10th to the 15th of September. That is my experience, whether it is worth anything or not.

Yours respectfully, H. L. RICHMOND.

The cultivation of rice in the Gulf section is annually assuming proportions of greater magnitude. Before the late war it nearly reached the yield of 200,000 bushels yearly; after the war its cultivation resumed on a large scale, and in 1870 the harvest was about 74,000,000 bushels. This year's crop throughout the Gulf States will reach, so says a South Carolina journal, nearly 150,000 bushels.

#### THE EATON RAPIDS FAIR.

The second annual fair of the Eaton Rapids Union Agricultural Society was held last week, commencing on Tuesday. The weather was about as bad as it could be, raining every day, and the mud frightful. But despite the discouraging outlook the Fair was certainly a success. The entries numbered over 1,900, and the show of live stock was excellent. The rain made it impossible to carry out the speed programme, for which a number of good horses were entered. Among other horses present was Richard H. owned by J. B. Hawley, of Charlotte, which as a two year old trotted a half mile in 1:30, and a mile under three minutes. He was sired by Mansfield, by Buckingham, by Rysdyk's Hambletonian. Mansfield won second money in a well contested race at the Lansing Fair, and first at Eaton Rapids and Charlotte. He is a well put together horse, a dappled grey in color, and weighs over 1,000 lbs. He is owned by L. A. Barnes.

The show of cattle were very good, but fine woolled sheep were the feature of the fair. Among the exhibitors in this class were T. H. Lyons with 13 head of pure bred and 13 head of grade Merinos, S. A. Freeman, of Eaton Rapids, with 12 head of pure bred, H. L. Carrier, of Dexter, with 9 head, L. H. Saunders, of Aurelius, with 15 head pure bred and two of grades. Mr. Lyons got first and second premiums on grade two year olds, and second on three year old pure bred bucks. L. H. Saunders carried off first and second on yearling bucks, and second on two year olds; and Mr. Carrier got first on his fine three year old buck. Mr. Geo. Thompson showed 9 head of Leicesters, very good ones, and A. Canedy had some Cotswolds.

In swine there were 30 pens on exhibition, comprising some very good ones.

In agricultural products the hall was filled completely, and the exhibit excellent. A larger hall should be built before the next exhibition. It was filled with visitors all the time the fair was in progress.

In attendance the fair managers have reason to feel satisfied. Although the rain was nearly continuous, and the mud deep enough to discourage most any one, the grounds were generally well filled with visitors, who seemed to enjoy themselves in spite of the weather, and appeared well satisfied. Had the weather been favorable, we should have had one of the most successful fairs of the season. The officers of the Society did everything in their power to make the fair a successful one, and it was thought that the receipts would cover all necessary expenses connected with it.

#### The Bedford Farmers' Club.

At the last meeting of this club the ten hour system and its adaptability to farm work was discussed, and the Monroe Commercial reports the argument as follows:

The discussion of the question "Would it not be better to work on the ten hour system than at present?" was opened by Mr. W. P. Hubbell, who said: I shall claim at once that no farmer who follows any branch of the business, except possibly grain growing, can stand it to do business on the ten hour system. He can't work like the mechanic, ten hours, and then lay down his tools. He must have time to feed his stock. A man who won't get up at five o'clock or thereabouts and go to work doing chores, is not worth hiring. If they will stay ten hours in the field, that will do; but that is more than any man can do, and after doing necessary chores. Mr. N. L. Willard: From my experience in farming, I think the farmer might as well give his hired man the farm as to come down to the ten hour system. So much time is spent in resting, that the time actually worked now is less than ten hours.

Mr. C. W. Eisenmann: I never worked on the ten-hour system, but I think it would work splendidly with me. I worked on a large farm, on the twelve hour system, and it worked well. I do not see why we cannot establish the ten hour system on the farm as well as in the manufactory. Working fifteen hours on the farm tires a man out so that the next morning he is more tired than when he quit at night. I believe that the ten hour system could be established, and men could do more work than they do now.

Mr. Hubbell: I should not feel disposed to take exceptions to the twelve hour system, because few farmers get more out of their men, including the feeding of the pigs, chickens, etc.

Adjourned for dinner.

While discussing the catables the members also discussed the ten hour system, but your correspondent was too busy to take notes.

After dinner no one seemed inclined to reopen the discussion. Finally the President called Mr. Hubbell to the chair, and said: When we think of establishing a ten hour system on the farm, it seems almost impossible, and yet, taking all times of the year together, we would get more work done than we do now. I have worked on the ten hour system, and I worked harder than I do now. During the harvest time we may put in more than ten hours, but the remainder of the time we hardly do it.

If we could do as they do on the public works, put in ten hours in the field, it would work; but we have a great amount of chores to do, and they must be done outside of that time.

Mr. Hubbell: Another thing in the way is, we have hands by the month and hands by the day. Our hands by the month must do the chores, and our hands working by the day of ten hours are in the way, bothering the men who are doing the chores, until it is time for them to go to work. When we hire a man we hire him to take hold of our business, and we have to get up in the morning and be doing it if we succeed.

Mr. Willard: The question is, do we count chores doing work? If not, then we can come to the ten hour system; but if chores are called work, then we cannot, because but little time would be left for work.

Mr. W. W. Hubbell: I think, from what I can judge, the ten hour system would be a good thing. The time could be so adjusted as to make an average for the time worked, whether it be a few months or a year. Working on some regular system would have a tendency to form regular habits. If men were expected to be on hand at a specified time, they would be there on time.

Mr. W. P. Hubbell: The question is whether it would be advantageous to the farmer to work on the ten hour system. I contend it would not. If the men do nothing until time to begin the ten hours then an extra man must be hired to do the chores, and that would not pay.

#### The Milling Qualities of Wheat.

A correspondent of the *American Miller* who signs himself an "Old Miller," has the following to say in regard to the milling qualities of wheat, and the practice that generally obtains among farmers of cutting their crop before it is thoroughly ripe:

"After reading an article in your valuable journal of Aug. 1, entitled 'Wheat and Its Flouring Qualities,' I am persuaded to place on file, with your permission, the result of an old miller's observations on the above named subject; one whose hand was on the lighter score years before the advocacy of early harvesting, when wheat was allowed to stand until fully ripe, and cut with the cradle; and with our then modern mills we made more and a better using grade of flour from a given amount of wheat than we are doing to-day by the new process, with our milling facilities.

This great change was caused by the advocates of early harvesting, and the reaper. As evidence, look at York State. Her flour once led the van in the world's markets, without word or comment; but immediately following the introduction of the reaper, the first complaint ever offered came privately: 'Your flour works soft and sticky—what ails it?' Yet, owing to the high standard of this flour in the English markets, it continued to sell year after year, though at a reduced price. This complaint became more emphatically expressed, until Liverpool dealers became disgusted with it, and ordered their agents in New York to buy no more of the "d—n doughy, sticky stuff!" This drove nine-tenths of the mill owners in the State to the wall.

Again, six or seven years ago, we noticed in a Michigan paper an article taken from the *Ohio Farmer*, advising its patrons to early harvesting. We also saw the following winter and spring Ohio and Michigan flour offered in the Boston market at \$6 per barrel, and that ought to have brought \$7, and would, had it not worked soft and sticky. This complaint has always followed the advocacy of early harvesting, and always will. It is a natural consequence. Wheat in its last few days, or even hours, of ripening, undergoes a great change, as nature in her last efforts to perfect her work, expels the moisture from the berry. At the same time the berry absorbs the remaining glutinous matter from the straw, and granulation becomes perfect. The moment a stalk is cut, this natural phenomenon of ripening ceases, and [drying up ensues, which leaves a portion of the most valuable matter



Horse Matters.

FOXHALL'S VICTORIES.

In the Czarwitsch stakes which were run for over the Newmarket course on Tuesday last, Mr. J. R. Keene's horse, Foxhall, won with the greatest ease. Nineteen horses started, and the betting stood nine to two against Foxhall. Americans made the running at a good pace, followed by Thunderstruck, Falkirk and Ambassador. The most prominent of the next lot were Retreat, Foxhall and Allerton. The horses ran thus with little change rather over a mile from home when Fiddler drew to the front, followed by Thunderstruck, Ambassador, Foxhall and Retreat. This order was maintained until a quarter of a mile from home when Foxhall shot to the front, followed by Thunderstruck and Fiddler, winning the race amid great excitement. Fiddler finished a bad third with Retreat fourth, and Fortissimo and Ambassador next in the order named. Americans, the Star and Petrol were the last three. Retreat followed Foxhall when the latter made his effort, but was eased when pursuit was seen to be hopeless. There was a length between Foxhall and Fiddler. Mistake finished third. Keene was delighted over the victory of Foxhall. His winnings are said to be upward of \$500,000, and operators of sporting propensities have won all the way from \$100,000 to \$10,000. Keene himself says that Foxhall was backed to win \$2,500,000. A great deal of American money was on him.

This race has established Foxhall's claim to be considered a first class race horse, and Mr. Keene thinks him the best three-year-old in the world. Foxhall is by Don Alfonso, a son of imported Phaeton, and his dam was Jamaica, by Lexington, out of Fanny Ludlow, by imported Eclipse. He is a bay horse sixteen hands high, with a star in the face and the hind foot white. He is very evenly built, rather long in the neck, but has a small neat head, strong shoulders, with a good back and loin. He is deep in the girth, but a little light in the flank. His quarters are well muscled, and he has a fine set of legs.

On commenting upon the race the London Times says:

"We may honestly and cheerfully congratulate America upon another solid triumph worthy of those by which the present racing season has been marked; but these triumphs are not purely American, as Foxhall and his dam are of pure English and Irish descent. Until one of our great races is won by a horse of American blood and breeding, trained and ridden by an American, Englishmen will not feel bound to acknowledge total discomfiture."

Foxhall is near enough an American horse to be classed as one. His sire was bred in this country out of an American mare, and he traces back to Lexington and Boston on the dam's side.

We have to add still another victory to Foxhall's record, as on Wednesday he won the select stakes, beating a lot of good horses, among which were Tristram, who came in second, and Maskelyne third.

THE AMERICAN HORSES IN ENGLAND.

The repeated triumphs of the American horses this season in England and on the Continent are of great gratifying and encouraging to those interested in breeding on this side of the Atlantic. It will serve to do away with a prejudice, now nearly extinct, that the climate of the United States was such as to prevent her breeders from ever competing with Great Britain in the production of horses of speed and endurance. While acknowledging the obligations this country is under to Great Britain for the parent stock from which our thoroughbreds have sprung, we think every unprejudiced person will acknowledge that the high qualities possessed by the English racehorses are losing nothing in the hands of our breeders. While we are congratulating ourselves upon these victories, it would be well to remember that American horses have not met a single horse above a good average in point of merit, and although Foxhall and Iroquois, especially the latter, have won their races with something to spare, it is yet to be proved that they are the equal of such horses as Isomony, Sterling, or others equally as good. The only horse that showed up to any advantage in the English Derby was Peregrine, and the betting previous to the race showed that the American was generally regarded as far superior to most of the horses he was to meet. By this we must not be understood as attempting to detract in any way from the merits of either Foxhall, Iroquois or Parole. They met the best horses on the English and French turf, and not only beat them but did it easily. If pressed to do better we think the reports of the races in which they were victorious show that they could have done so.

Since the above was written the report of the race for the great Champion stakes has come to hand. Iroquois was thought to have a pretty sure thing in this contest, but he was beaten. Ben O'Rourke came in first, Scobell second and Iroquois third, two lengths behind Scobell. It is said Iroquois faltered just as he ascended the rise on the home stretch. Ben O'Rourke, it must be remembered, has the advantage of a year in age over Iroquois, and has not been subjected to such a severe campaign as his opponent this season. He, however, carried extra weight. Ben O'Rourke won the Derby last year in fine style, and is a good horse in every way. He also beat Foxhall last spring for the City and Suburban stakes, Foxhall being second. But the latter is a much better horse now, and a match between him and his former opponent would be an exciting one.

The Horse's Frog.

If we were to go to any blacksmith and ask him if he did not think nature had made a mistake in putting the clumsy frog into the horse's foot, he would hardly be willing to say yes, but would put on an assured look and perhaps explain that in some countries horses did very well without shoes, and so the frog was left to care for itself. But while not ready to take

ground with you in any criticism of the plan upon which the foot is constructed, you have but to look in the corner of the shoe where two horses stand newly shod; lift up their feet and observe for yourself that the frog is a bad thing and must be cut away. The horse does not stand on the ground, but nearly half an inch high, on the iron of their shoes, and which puts the weight of the horse on the outer shell of the hoof. The practice is as sensible as it would be for a man who had to travel on all fours, taking his weight on the nails of his fingers and toes rather than on the cushion that lies between them. It is always the soft part—the India rubber part of the feet of animals that have such—which receives the weight, and not the shelly, hard part. We know what an elephant's foot is; it is all rubber-like. The horse has the same encased in a shell, which gives him accuracy and steadiness of movement. Now, this casing protects the frog. It grows slowly, the frog grows rapidly. The healthy foot of the colt shows a center, if not projecting, at least level with the line of the hoof. He does not take his weight wholly on the rim of his feet. Old horses would have feet more like them if blacksmiths would allow that they knew a little less than nature, and really knew enough to read her intentions. The object in shoeing the animal, aside from the occasional one of changing its gait, is simply to prevent the wear and shattering of the outer shell, and to enable it to take a firmer hold of the ground, escaping the slipping of the unshod horn. It is an unfortunate incident of our system of shoeing that the horse is raised from the ground as a boy is when he mounts stills.

Farm Matters.

What is a Shropshire Sheep?

The following is the account of the history of the Shropshire sheep in the London Agricultural Gazette. The history of this valuable breed is now well authenticated. There has never been any doubt about the Oxfordshire-Downs, as they are termed, as it has been well known all along that at the former part of the present century a direct cross between Hants-Downs and Cotswolds was made, and the issue kept together till a fair uniformity of type and quality of wool were established. The way this cross breed has spread in Oxfordshire and some adjoining counties, and the way they have been improved in the color of their faces and legs, from mottled shades to uniform black or dark brown, by the skill in selection of the leading breeders, is well known. It will suffice to say that the breed is a valuable one for the production of wool, and with the dark points now produced the mutton makes a high price in the markets, as butchers leave a small piece of dark skin on the legs and shanks, and thus fairly enough get Down prices for the joints.

But the Shropshire has a different and more complicated history. They are indeed not Shropshires in the strict sense of the term. A more comprehensive and correct term for them would have been West Midland Downs, as we shall shortly show. There are two old breeds on which the present Shropshires were grafted, so to express it. Oddly enough, too, these old breeds are natives, as they may be termed, of the two extreme points of the West Midlands. Cannock Chase is at the eastern, and Clun Forest at the western extremity. The centre of the picture has to be filled up by what occurred in Mid-Shropshire and West Staffordshire and all over Shropshire.

Several decades ago there were developed great industries in coal and iron at Wellington, Coalport, and other districts in Shropshire. Wolverhampton simultaneously largely increased in population. The demand for mutton and lamb, of course, largely increased at the same time. To meet this demand, and to take advantage of it for their own profit, the farmers of Shropshire extended their turnip and green crops, and looked further afield for breeding sheep. The native stocks, in short, were not equal to the increased demand.

Breeding sheep were sought and bought in the midland and southern counties every autumn for many years, and they were walked to Shropshire and Staffordshire by thousands. Numbers of farmers paid this annual southward visit with this view. The occupier of Pashall at that time, Colonel Jones, was a pioneer in this movement. Some farmers bought Leicester ewes, other South-down, and other Hants-Down ewes, while according as taste ran for an increase of wool, or early maturity was required, so long-wooled rams were put to short-wooled ewes, or the opposite practice was pursued. Thus Shropshire became filled in the course of time with a large stock of all the best breeds of sheep in England. So much was this the case that ultimately there was no necessity for the farmers of the West Midlands to turn southward in search of stock sheep. There still remained flocks of old native breeds. Eventually these native breeds and the migrated stocks were brought together. Hence the want of uniformity in color and quality, and length of wool that existed thirty or forty years ago. And hence, too, this breed of sheep, like the Anglo-Saxon race of mankind, is equal to every quality of food, and adapted for almost every climate.

The stock of the old Cannock Chase sheep has no doubt given this breed the dark color and fine flavor of their flesh. We have been informed that the flock of Beau Desert is the oldest one of this breed which has a recorded history. The quality of their flesh and fat has been celebrated for many years as being more like venison than mutton. So much was this the case that the late Marquis of Anglesea had unlimited standing orders from the distinguished guests who visited him, to send quarters, sides, or carcasses to noblemen and gentlemen all over the kingdom, and could his agent have produced ten times as many, the demand would not have been supplied. These

were somewhat leggy and flat-ribbed sheep, with black points, and some of them had short horns curving prettily upwards. They of course took some time to get fat, and the mutton the noble marquis used to put before his guests was four or five years old. But so much for quality.

Then there were the short-legged and more early maturing stock which had been cultivated in and around Clun Forest. The sheep undoubtedly had—and the old-established flocks still have—a large strain of the Welsh breed. Their contour and walk still show this. The ewes of this breed were bought in large numbers for producing fat lambs near London on the Essex and Hertford sides. They are reputed to be the most prolific in yielding milk of any known breed. So well is this reputation established in the districts named, that the farmers do not mind losing 5s. per head on the ewes when they are sold fat in the following summer, as they produce such good and early lambs that they make from 35s. to 45s. and 50s. in April and May. This is, no doubt, the reason why Shropshire ewes may be justly looked upon as equal to any breed for suckling their lambs.

It was among these two breeds that the Leicester and Downs, as above described, were introduced. Of course great want of uniformity and type was the result. Different opinions and tastes on the part of farmers had also much to do with this. Some preferred the old-fashioned mottle face with a South-Down type, while others liked large sheep and black points. All this want of uniformity was made more and more conspicuous when the Shropshire breeders prevailed on the Royal Agricultural Society's authorities to appoint separate classes for the Shropshire breed of sheep. Judges at shows of course also differed in opinion. One year two out of the three were in favor of the more South-Down color and type, while the next year two were in favor of dark color and more size, notwithstanding the legs of the sheep were a little longer, and that the latter required more care and corn to mature them early, or more time to get them fat in the ordinary way. The advocates of the latter argued that there were several breeds of small sheep, some of which were deficient of flesh as compared with the fat they produced. Upon this they said:

"We have in the Shropshires large frames and ample lean of dark, rich color. The smaller Down-like frames must be discarded, and the larger sizes cultivated." The results, as seen at the present time, have clearly proved that the latter advocates were right. This conflict of opinions and diversity of taste led to warm discussions. It was shown that in more than one instance pure South-Downs had been introduced to flocks of the established Shropshire stock. In each instance the flock "went all to pieces," as it was termed. This was a lesson for the possessors of flocks which had been cultivated for many years on the lines above described. Out of this discussion, too, came the conclusion that dark points of uniform color, with the largest possible size of frame, were the correct objects to arrive at. The more experienced and consistent breeders came to this conclusion among themselves about the time of the "Royal" Battersea Show in 1863, and most admirably have they carried it out by their skill in the art of selection.

It may seem odd at first sight to some breeders to read of a uniformity of black or dark brown faces and legs, when it is allowed or asserted that strains of the white-faced Leicesters have been introduced into flocks; but this is just a point which throws a light on two leading features connected with breeding—(1) on the skill of the modern flockmaster, and (2) on the way animals of a mixed breed will "breed back" from the strains of their ancestors of many generations ago. Take the latter point first. It occasionally happens in the best flocks of Shropshires that a lamb appears with a long, wavy, "open" or "watery" fleece. This is a clear indication that Leicester or some other long-wooled breed was introduced to the Shropshire flocks at some remote period. The symptom appears as scrofula or other blood poisoning does in the third or fourth generation of mankind. The way, however, these "open" coats have been made exceptional, brings us back to our first point, viz., the skill of modern flockmasters. When the long wool appears, it is generally accompanied with a speckled (or what appears to be a half-breed) face. Whether the lamb be male or female, it is at once discarded from the flock and fed for the butcher. In this has consisted the judgment, care and skill of the modern breeders of Shropshires, who have brought their flocks to their present state of uniformity.

The Corn Worm.

D. W. Coquillett, an Illinois correspondent of the *Germanian Telegraph*, writes to that paper the following description of the corn worm (*Heliothis armiger*) which has made its appearance in this State, and was referred to in a recent issue:

"In many of the Western States the corn-crop is being considerably injured by a greenish worm which lives beneath the husks and devours the kernels. This same worm in the Southern States feeds upon the cotton bolls, and on this account is there known as the *boll worm*. It does not confine itself to those two great staples of our country—corn and cotton—but also feeds upon tomatoes, peas and beans. These worms vary in color from a dull green to pale brown, and are sometimes tinged with pink. This difference in color is due largely to a difference in the quality of their food, as those found in the green corn are usually green, while the darker ones are usually met with in corn that has become more mature. They are usually marked with darker stripes—the green worms with stripes of darker green and the brown worms with stripes of darker brown. In the latitude of Northern Illinois there appears to be but one annual breed, and these pass the winter in the chrysalis state. When fully grown they burrow obliquely into the earth to the depth of five or six inches, and line their burrow with a thin layer of silk; in the bottom of this

burrow the worm soon casts off its skin and assumes the chrysalis form.

"As these worms live concealed from view beneath the husks, their presence is seldom discovered until after they have done all the damage that they are capable of doing; and it seems almost impossible to devise means for exterminating them while they are in this situation. After they have entered the earth and assumed the chrysalis form, however, they are more at our mercy. If the ground in which the chrysalids are hidden is either plowed or otherwise stirred so as to sift the loose dirt around them, the first rain-storm that comes will cause the dirt to adhere to them, and this, in connection with the subsequent freezing, nearly always proves fatal to them; whereas if they had been allowed to remain in their burrows they could have withstood any amount of freezing without receiving the slightest injury. Where large areas are planted to corn this is a seldom harvested early enough to permit the ground on which it is grown to be plowed the same season. In cases of this kind a small triangular one horse cultivator may be run between the rows, and this will disturb the greater number of the burrows of this insect sufficiently to cause the chrysalids to perish. It should stir the ground to a depth of at least six inches, and to make assurance doubly sure the field should be cross-cultivated. This should be done as late in the season as possible, so as to give the worms sufficient time to cause the chrysalids form before their burrows are disturbed, or else after the worm is unearthed it will form a new burrow and thus pass the winter in safety."

Eggs in Winter.

*Farm and Garden* says the breed of hens in less in importance than the care which they receive, as shown in increased egg production:

"The pullets having been secured, no matter what breed they may be, they must be well fed in order to furnish eggs in winter. Feeding well does not mean simply giving them all the corn, or oats, or wheat they will eat. Feeding well is feeding at the right time, in the right manner, with a variety of good food. The fowls are in confinement, having only a small yard for a run. But they need gravel, insects, and a variety of spicy and aromatic seeds, as they get when foraging over a wide territory, or something to take the place of these things. And with these they need exercise. It will be well therefore to make the floor of their home of gravelly sand, and throw coal ashes into their yard frequently; also to put a little box in the house and keep it supplied with granulated oyster shells. Keep plenty of clover hay or straw in their house. Sweepings from the barn floor, dried grass or weeds from the garden, or anything of the sort will be useful. A sheaf of wheat or oats hung up within reach, will also be beneficial. For their daily food, we will give them, early in the morning, wheat screenings, wheat, or buckwheat, or cracked corn, a handful for each fowl. This should be scattered in the straw, on the bottom of their house. They will find every grain of it, and if it keeps them scratching until noon, so much the better. At noon we will give them soft food, bran and corn meal in equal parts, scalded or wet with milk. This should contain two or three times a week, a good sprinkling of red pepper, or ginger, and a little salt. Just before dark they should have a generous supply of whole corn. Of course, water must be supplied, and the table scraps are always acceptable and beneficial. To supply meat, which in limited quantities is very useful, is a good plan to put a few pounds of beef or pork scraps in a box with slatted sides. The fowls can peck at it through the slats, and it can not be eaten or carried off by dogs or cats. If the cracklings are rich and fresh, it is the safest plan to boil them and thicken with meal, thus making a mush that can be fed at pleasure, in suitable quantities. In cold weather, both grain and soft food should be supplied warm, not hot."

Farming by Electricity.

Dr. Siemens, Fellow of the Royal Institute and a distinguished member of the Institute of civil engineers, has been making some recent experiments with the electric light, which seem of the highest importance. They are claimed to prove that the electric light can develop growth of vegetation. Wheat, barley, oats, most of the common vegetables and fruits and several kinds of flowers have been successfully raised in this way in the winter months. Peas, for instance, sown in October, were ripe on February 16, the light having been intermittent only Sunday nights. Grain sown January 6, aided by electric light till the beginning of May, was ripe in the latter part of June. Agricultural operation can thus avail itself of electricity during the cold season, and also at night. Dr. Siemens claims that fruit developed in the way mentioned, is superior in size, aroma and color to that produced in the natural way. He concludes that rest at night is not necessary, as has been asserted, for the health of plants. Growth with intervals of rest at night, he finds, makes longer stalks, but not superior fruit. Bananas of remarkable size were produced by Dr. Siemens. The machinery used for producing the electric light can, when in the day time, or in warm weather, not needed for agricultural purposes, be utilized for various other operations, distributing water, sawing wood, or something of that kind. To protect the plants from the direct rays of the electric light jets of steam or panes of glass can be used as protection. Where water power is available the cost of this method of farming is said to be very moderate. Especially is this the case in green houses, so many of the ordinary sources of expense being made unnecessary. For this department of horticulture Dr. Siemens claims that even the steam engine as a source of power can be made profitable.

Sound Logic.

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NEW ADVERTISEMENTS.

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THE CORN WORM.

D. W. Coquillett, an Illinois correspondent of the *Germanian Telegraph*, writes to that paper the following description of the corn worm (*Heliothis armiger*) which has made its appearance in this State, and was referred to in a recent issue:

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cussion of the means of storing electricity. His rank as a scientist is so high that his present announcement will receive profound attention.—[Rochester Express.]

Agricultural Items.

In Ireland the butter trade is regulated by act of Parliament. The farmers assembled in the morning and have all their casks arranged in the market place, when the authorized coopers proceed to take out the head of each cask, fanned the inspectors follow, without knowing to whom the packages belong, and mark the quality of each with proper distinguishing characters.

There is one thing which we must consider, in estimating the value of our load of manure to the wheat crop and that is, that a manured crop is practically insured against rust, fly, chinch bug, frost and many dangers which beset this crop. It is the experience of most wheat growers that manure imparts a vitality to the crop which enables it to resist all these dangers, and this is fully proven when one part of a field is manured and the other part left without.

"KISSING goes by favor" the world over. The *Homeside* tells of a South Hadley farmer who exhibited at an agricultural fair two samples of grain, taken from the same bin, entering one of them in his own name, and the other in the name of a well-known "fancy farmer" of the neighborhood. When the premiums came to be announced, the sample marked with the name of the fancy farmer took the first prize, while the other lot, identically the same in every respect, was unnoticed. This may do to tell of New England, but it is unthought of in Michigan.

A WRITER in the *Ohio Farmer*, after mentioning some of the disadvantages of barbed wire fencing, recommends a substitute in the form of hoop iron. The writer says: "One and one-half inch hoop will only cost \$3.50 per 100 pounds, can be bought up cheaper and quicker, and makes as durable a fence as one of wire, and if tarred, will last a lifetime; if painted white, it makes a beautiful light fence, besides a harmless one for any kind of stock, and as a security of good fences is seen all over the country, the hoop fence above all other fills the bill. Old sand rails would be good for supports or standards.

Sound Logic.

"There is nothing so successful as success!" The success of INGRAM'S AGUE PILLS convinces the most incredulous that they are the only reliable Antidote for Malaria known. For years they have been used for all Malarial Diseases, (Ague, Chills and Fever, Neuralgia, etc.), and never once known to fail. People should bear in mind that these Ague Pills, (so great is the faith of druggists in their virtue) are guaranteed to cure. No cure, no pay. 75 cent, oval shaped pills in a box. Price 50 cents. Sold by all druggists. Swift & Dods, Agents, Detroit.

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Prof. S. G. Rice's marvelous system of teaching music is winning golden laurels in every State in the Union. We have seen at his Chicago office thousands of testimonials from our readers. This magic system is from 12 to 24 times more rapid than all other equally correct systems combined. He sends one system on test to responsible persons, and it applies to organs, pianos, guitars and violins. Prof. Rice wants local and general agents, and will send samples free to any upon application. Knowing the perfect reliability of the Professor's system, we advise our readers to procure it. Address Prof. S. G. Rice, 243 State St., Chicago, Ill. jyl3eov9

NEW ADVERTISEMENTS.

TOAL HORSE OWNERS COMBAUL'S

THE GREAT FRENCH VETERINARY REMEDY Prepared by J. M. Combaul, ex-Veterinary Surgeon of the French Government Stud. A Speedy, Positive and Safe Cure for Croup, Splint, Swollen, Gapped Hock, Strained Tendons, Founder, Wind Puffs, Mange, Thrush, all Inflammations, all Throat Difficulties, all Swellings or Ulcerations, all the Lamenesses, Spavine, Ringbone and other Bony Tumors. It is far superior to a blister or cauterization in its beneficial effects, leaves no scar, and is as convenient as a liniment. Combaul's Balm has been a standard veterinary remedy in France and Germany for over twenty years, and has cured the most obstinate and dangerous cases of America recently tested with unfailing success. The guarantee that one tablespoonful of Combaul's Balm will produce more actual result than a whole bottle of any liniment or spavin cure mixture ever offered in any market of the country. Every bottle of Combaul's Balm is warranted to cure all the above named diseases, or the money will be refunded. It is sold by druggists or sent by express, charges paid, with full directions for its use. J. M. COMBAUL, Sole Importers and Proprietors for the United States and Canada 345 Superior Street, Cleveland, O. Send for circulars and testimonials free. For Sale by Wholesale by Jas. E. Davis & Co., Detroit, and other druggists.

THE CORN WORM.

D. W. Coquillett, an Illinois correspondent of the *Germanian Telegraph*, writes to that paper the following description of the corn worm (*Heliothis armiger*) which has made its appearance in this State, and was referred to in a recent issue:

"In many of the Western States the corn-crop is being considerably injured by a greenish worm which lives beneath the husks and devours the kernels. This same worm in the Southern States feeds upon the cotton bolls, and on this account is there known as the *boll worm*. It does not confine itself to those two great staples of our country—corn and cotton—but also feeds upon tomatoes, peas and beans. These worms vary in color from a dull green to pale brown, and are sometimes tinged with pink. This difference in color is due largely to a difference in the quality of their food, as those found in the green corn are usually green, while the darker ones are usually met with in corn that has become more mature. They are usually marked with darker stripes—the green worms with stripes of darker green and the brown worms with stripes of darker brown. In the latitude of Northern Illinois there appears to be but one annual breed, and these pass the winter in the chrysalis state. When fully grown they burrow obliquely into the earth to the depth of five or six inches, and line their burrow with a thin layer of silk; in the bottom of this

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## Horticultural.

### FLORICULTURAL.

By proper packing, delicate plants may be sent to all parts of the United States, at a very small cost. They can be sent in full bloom, and will live two weeks. A correspondent of the Philadelphia Progress thus describes the process, and adds a few facts as to the magnitude of the trade: "The plants in the greenhouse were standing in red earthen pots, so thoroughly sprinkled that the earth was saturated with water until it was like a sponge. The process must be very carefully superintended, that by so much wetting the earth does not become half liquid, in which case the roots would be exposed and the plants soon die, whereas, if just sufficient water is given, the plant lives on the water, and thrives for a time, although it may be deprived of the sunshine, which is its chief life-giving source. It is astonishing to note the rapidity with which some of the workmen handle fragile plants. In the process of potting, for instance, which means the removing of the flower from the earthen bed, where it started its existence, into a small earthen pot, some of the expert workmen can transfer 10,000 plants a day. The average hand can only 'pot' 2,000 in a day, and even this seems extraordinary, when we consider the actual manual work required. Workmen are kept constantly busy preparing flowers that are intended for shipment from seeds or slips, which branch of the business they call 'manufacturing' flowers. The most interesting part of the industry to a spectator is large order so sent by rail. First, the plants are selected and moistened; then they are removed from the pots with the earth clinging to them, rolled in brown paper, and neatly packed in boxes or baskets. Sometimes one florist will ship on an average two tons of plants daily during an entire season. Others who send by mail chiefly, dispose of 3,000,000 plants a season; probably as many as were raised in one State by the entire number of flower-growers twenty-five years ago. As a rule in the largest nurseries each greenhouse contains but one kind of flower, and the effect of this arrangement is extremely beautiful. Imagine a long vista making a brilliant perspective of glowing verbenas, grouped by thousands in little red pots. Then next in your promenade comes a miniature forest of blooming rose trees, or a soft undergrowth of mossy like greens, then another glass-house heavy with the perfume and shadow with the colors of the delicate heliotrope. As we see these lovely gifts of nature growing in their perfect abundance with all their surroundings looking so clean and finished, it is difficult to realize what care and time have been given to each particular plant, which like all other perfection appears to have been born perfect, so little thought has been given to the Creator and His work. What are called flower auctions are held every week, and more than 100,000 plants are sold by auction every week. They are sold by the box and basketful, tightly packed for transportation, as I have described, and can be shipped as safely and easily as a case of dry goods. Sometimes they sell at ridiculously figures, for instance roses or geraniums, quoted by florists at fifty cents and \$1 each, will sell, when packed in quantities, for three or four cents apiece. Then again they may go off at higher rates than the price list. The salesmen at one of these auctions is a lovely sight. The boxes being free from lids, the auctioneer arranges them like a miniature flower-bed, in the carpet or ribbon style of bedding, closely packed together, with the hues arranged in contrasting masses of lines. Retail florists know when to buy, and when they have bought, how to sell again at several hundred per cent profit."

"While the lover of flowers is preparing for next summer's bloom and brightness, and planting roots and bulbs to establish themselves in the mild autumnal weather, the old-fashioned but showy and magnificent Peonies should not be forgotten. The art of the florist has produced an almost endless combination of colors and diversity of hues, but after all, there is as much pure beauty in the old dark blood red variety as in the new and more fashionable sorts. A large clump of this, in full bloom, is a striking and conspicuous ornament in the spring, and appears to be its best advantage under such circumstances. The emerald setting is needed to bring out the color and form of the flower."

**The Cabbage Worm.**  
A correspondent of the Cincinnati Times writes up the cabbage worm as follows: "The cabbage worms have been unusually active the past season. The heat and the dryness of the weather intensified their appetites and multiplied their numbers to an alarming extent. Of the many things prescribed for their destruction I find that none possesses the quality of destroying the worms and at the same time leaves the cabbage in a pure, healthy condition, except pyrethrum. Having studied the worm's ways of perpetuating its species, and tested the different remedies advanced by plebeian and scientist, it occurred to me that I could not do the whole people a better service than to lay before them the result of a careful examination of this subject."

A Massachusetts gentleman has pronounced an infallible exterminator of this mischievous pest—saying them, he says, by the wholesale. I have found, however, that only a small percentage of the worms succumb to this widely advertised remedy, unless red pepper is used extensively, so extensively indeed, that it would be more economical to buy cabbage at any extravagant price than pepper enough to destroy the worms. The worms on our grounds have wallowed seemingly to their intense delight, on cabbage leaves thoroughly sprinkled with the above "remedy," and instead of depriving them of life, they seemed to grow prodigious, both in appetite and numbers. There are two reasons why the

Massachusetts man's worms may have disappeared without being influenced by his remedy.  
"At the application of his remedy the worms may have been full grown and arrived at the period of life when they were about to transform from worms to moths or fireflies. In this case, they would have quit the surface of the leaves and suspended themselves on the under side, shrinking up their bodies and forming a shell of what was heretofore their natural hide. In this form they are apparently dead, though in reality they are obtaining new life in a new form. Another reason is that the worms, when they attained maturity, as worms proper, might have found the weather too moist for wholesome transformation to moth form. In this case, the worms would die in large numbers of their own accord, since moisture retards their transformation immensely, and since the worms have to either die or transform at maturity."

"Remedies applied at this juncture would undoubtedly get credit for destroying the worms, when in reality they died from natural causes or hid away to obtain the process of evolution. An Indianapolis gentleman requested us to treat our worms to salt and water. We did. They enjoyed the salty bath hugely and seemed to prefer the leaves thus flavored. Warm water has been recommended. We are confident that the worms will bear several degrees more of heat than the cabbage, since the leaves wilt in intense heat, while the worms attain the higher degrees of prodigality in high temperature. Coal oil mixed in water and syringed on the plants has been recommended. This will kill the worms, it is true, as the oil penetrates their porous hide and reduces them to a crisp. But the oil will also penetrate the heart of the cabbage, and cause stult or decay. We fled however that sponge or cloth saturated in pure coal oil and pressed on the worms deprives them of life immediately without injuring the plants."

"Pyrethrum, or Persian powder, possesses the qualities of destroying cabbage worm life and at the same time leaves the cabbage in a healthy condition. Since the powder is not poisonous, it is the peculiar odor of this powder that it is fatal to insect life. It is beyond the conception of many how the innocent-looking butterfly that hovers over the cabbage ground could be the parent of the cabbage worm. These flies are of a pale yellow color when young, and change to a pure white as they mature. Some have recommended the trapping of these flies to prevent propagation. Better to destroy the worms, since each worm under favorable conditions changes to a fly, and the flies in turn produce the eggs which hatch the worms. By these methods of propagation the cabbage worm will pass into the third and fourth generations in a single summer."

"J. C. Sheets, Esq., of the Cincinnati Sanitarium, had on exhibition in his office this past summer, in a glass-covered cigar-box, samples of the cabbage worm undergoing transformation. Eight days, he says, is the time they usually take in the process of passing from worm to fly. The worms must be healthy and fully developed before they can assume the power of changing to butterfly form. J. C. S. is rapidly gaining a reputation as an entomological scientist. Whenever he desires to raise a crop of butterflies to amuse his friends, he simply gathers in the best specimens of cabbage worms and confines them in a glass covered box. The worms adapt themselves to new situations and begin the process of evolution at once. In a week they are perfect butterflies, active in life and motion."

**A Summer Pear.**  
A. B. Allen, in the N. Y. Tribune, thus descends on the good qualities of one of our summer pears:  
"The Doyenne d'Ete or summer pear is one of the earliest, and I am confident if farmers know how hardy, thrifty and quick-bearing it is every one of them who care in the least for good fruit would immediately set out a few trees. Some of my trees are planted in a poor, white sandy soil, others in a mixture of sand and gravel, and both grow and bear equally well. The sandy soil was mulched by forest leaves and marsh hay, in order as they decayed to give vegetable food for the growth of the trees; but those on the gravelly soil were not mulched, this being richer than the former. Both were lightly manured from the stable. This was not spread broadcast over the whole land, but for the sake of economy and making it go further, was put in a ring two feet from the trunk of the tree, to a point a foot or so beyond a perpendicular line dropped from the ends of the branches to the ground. As the branches extended from year to year the ring of manure was widened. In this way it did not require over about five to horse loads to the acre; but had it been spread broadcast, it would have taken twenty loads to the acre to be equally efficient. Manure should never be put nearer to the trunk of a tree, than two feet to begin with, and it may be spread further and further off, as the tree grows; for it is only the very small roots—some almost invisible to the naked eye—which take in fertilizing elements for the growth of tree and fruit; thus the manure is only needed on that part of the soil to which they extend."

"This summer pear begins to bear the year after being set out, if the trees are then four to five feet high, and they bear more or less every year after. Some of my trees, only nine to eleven feet high, and with about the same width of branch, had from 600 to 800 pears set on them the past spring. They hung upon the branches like currants or gooseberries. After about a month old I cut off one-half of these, and even then when full grown they touched each other. The fruit in early seasons begins to ripen the middle of July, later seasons 20th to 25th, and continues one month in a dark coal color, or put into a box and placed in the ice-house, it can be kept several weeks longer. The pears are of a roundish obovate shape, one and a half to two inches long, and the same in diameter in its broadest part. It is yellow on one side and a bright pink on the other—very pretty to look at. This flesh is white,

tender and juicy—in fact, almost melts in the mouth when eaten at the exact time of ripening. The Doyenne d'Ete comes in the season when such fruit is in request, and it sells readily in the market. I would recommend its growth particularly to those farmers who entertain summer boarders, for they will find it an excellent supplement to the smaller fruits, such as raspberries, blackberries and whortleberries."

### Home-Made Fertilizers.

The English Gardener's Chronicle has an article on the use of some substances that are frequently little valued as manures, but which are really valuable. The article is by the gardener at Eridge Castle, Scotland:  
"I have long had great faith in root as a manure, and have had a covered box placed near the castle, into which the sweep puts all the soot from the chimneys and flues, from time to time; this, in the course of the year, amounts to an incredible quantity of manure, and very handy and useful we find it. When a piece of ground is dug we give it a dressing with soot, and then, in gardening phrase, 'break it down' for the crop; this really means running a harrow or rough rake over it, and it mixes the soot with the soil nicely, and the result is always satisfactory in the crop. Last year our onion crop showed unmistakable signs of the maggot; I immediately had the piece dressed with soot. Heavy rains set in just after, and soon the onions were on their legs and the maggots gone. The rain water from off the roof of the kitchen runs into a tank, and is heavily charged with soot. This is handy to the flower garden, and we find it capital for watering flower beds in summer. The park, one autumn, had a lot of what country people here call 'old toor'—why I know not, but it means a lot of old, coarse grass, and I ordered on it a good dressing of soot in the spring, and it soon gave place to fine young, fresh grass, and ever since the deer and highland cattle may be found at pasture on this brow."

"While I am on this subject of home-made manures, allow me to mention a few others, and the next shall be ashes, and more especially wood ashes. This is invaluable in a garden, if kept dry till used. We all know what a terrible plague 'the club' is among the Brassica tribe. Well, if the seed be sown on the surface and covered with ashes, and at planting time a hole, with a large dibbler, is made in the ground and filled with the ashes, inserting the plant into it, I have never known the club to trouble one, and it is the best thing to dress lawns and meadow lands, encouraging the best grasses and clovers. In a woody country, like this, there is plenty of charcoal dust at the bottom of the heap. This is most useful for potting or fruit tree border making. Some say it makes grapes extra dark in color; this I cannot positively be sure of, although I rather side with the belief. Lime is not nearly enough used in gardens. Every bit of ground I should, in my opinion, be limed once in five years. It kills slugs and insects, and lichen on trees, and acts chemically on the ground, and is often better than manure for certain crops. I remember once seeing ground dressed in the gray lime, produce barley fifty-seven pounds per bushel. Horse-hoof parings make a most excellent manure for potting vines, paragoniums, etc., and one can easily make arrangements with the nearest blacksmith to save them. When one reads of horn shavings being run after, I often think there are good at the village forge. Bones are most valuable in a garden; they decompose but slowly, keep the ground open and are invaluable in vine border making. The champion bunch of grapes shown at Edinburgh some years ago, weighing over twenty-five pounds, did the clever gardener who grew it great credit; but it should also be known that there were heaps of bones in the border. A gardener whom I had got a good situation for, took it into his head to send me a couple of geese at Christmas time. The geese were eaten, no matter when or where, but the bones were saved; these, with some others, were put into the bottom of two vases on the terrace wall, two good plants of Tom Thumb paragoniums were planted in them, and at the end of September they measured seventeen feet six inches in circumference. So much for bones, and plenty of water."

**Horticultural Notes.**  
Coal ashes at the rate of about 25 bushels per acre are now asserted to be a perfect specific for the onion maggot, and as they are easily procured and applied, a trial at least could be given at very small expense."

An Indiana farmer contends that the excellence and healthy condition of his orchard may be ascribed in a large measure to the fact that the heads of the trees are very low and very thick in the top. The branches meet and interlace, the trees being but thirty feet apart, and therefore the sun's rays rarely strike the bodies of the trees or the ground near them, and the wind has but little effect on them."

Mr. NELSON RITTER, Syracuse, N. Y., has had admirable success with packing grapes in single layers, in small, shallow boxes two inches in depth, with sliding covers. When he packs fruit two layers deep he places paper between the layers, the same as advised by Mr. Humman. Mr. Ritter has found the Isabella, Catawba, and Clinton to be the best keepers, while Salem and Diana have proven fair keepers."

An excellent compost for putting around the roots of newly planted fruit trees may be made as follows: Two loads of swamp muck, one load of rotten stable manure, one barrel of bone dust, one barrel of air-slaked lime, and a barrel of wood ashes. These may be well mixed in a heap and covered, with a few inches of earth, and after two weeks turned over and thoroughly mixed, and more earth may be added if thought too rich. This will make a good supply for one hundred trees."

**A New Enemy to the Celery.**  
The German Telegraph gives the following description of a worm which has attacked the celery crop of that vicinity, and believes it identical with the corn worm (*Heliothis armigera*) which is ravaging Western corn fields. No remedy has as yet been found for its depredations:

"For the first time noticed in this section the growing celery-plant is being attacked and seriously injured by a rather singular-looking worm, belonging to the 'measuring' family. It is of a greenish color, hairless, ranging from a half inch to over an inch and a half in length. When it reaches its greatest length it is almost transparent. It is a voracious devourer; and, while it apparently prefers the celery, it is not particular in its diet, and will attack even the leaf of the ruta-baga. In some celery-beds it appears in thousands and eats into the stem to such an extent as it is believed will utterly destroy the plant for culinary purposes. We have a few upon our premises, but so far they have not multiplied numerously enough to do any damage. Doubtless the extraordinary drought has had much to do with causing it to seek other than its accustomed pastures."

The Iowa Sentinel, in a recent issue, bore testimony to the value of the Concord as a market variety and for popular consumption, in the following terms: "The only fruit with which the market is well supplied is grapes, and the only grape the Concord; every other variety has failed. The Concord is so uniformly successful that we urge upon fruit growers the importance of giving special attention to it. No other crop is more profitable. It is stated that one Iowa man will clear two thousand dollars off his crop this season. For flavor, size, beauty and productiveness it is unexcelled, and severe winters do not hurt it, while it fairly revels in drought. Nothing is handsomer than a big bunch of

these grapes, with its round black fruit and handsome bloom. They have been selling freely at from three to five cents a pound."

It yearly takes 300,000 acres of forest to supply cross-ties for the railroads of the United States. It takes 15,000,000 ties to supply the demand, for which on an average the contractors get 35 cents apiece, making in the aggregate \$5,250,000. In building a new road the contractors figure on 3,700 ties to the mile, while it takes 300 ties to the mile to keep a constructed road in repair. The average of a good piece of timber land is 200 ties to the acre and 12 ties to the tree. White or burr oak is considered the best timber for the purpose, although cherry, maple, ash, and even locust have been used. The business gives employment to an army of choppers, who are paid ten cents apiece for each tie. A single man has been known to get out thirty-five ties in a day, yet the average is only ten, while an expert will probably get out twenty."

PEACH pits are best planted now while they are fresh. They may be planted in rows in good mellow soil about a foot apart, and the soil covered with coarse litter. This should be removed in the Spring; the young trees can be transplanted with a garden trowel without disturbing them when a month old. Some kinds of peaches reproduce themselves true from seed, but it is quite probable that some good kinds may be procured, although they may vary from the parent kind from which the seed has been taken."

PRUNE culture is a great success in the uplands of California. Nothing can exceed this fruit in weight and production. In Petaluma every branch is loaded, and every prune sound. The pits are extracted by machinery and used for fuel. So rich and juicy are the California prunes as to drive the German prunes from the market whenever placed in competition. Each tree bears about 100 lbs of prunes, worth 14 cents per pound at wholesale. One hundred trees are planted to the acre, and the entire cost to pit them for the market is five cents per pound."

WINE growing is being successfully pursued in Virginia, and is rapidly assuming larger dimensions. It was first introduced by Germans, but others are now taking a hand in it. One firm, with 37 acres of land, has produced 3,500 gallons of wine in a season. It is reported that the yield of two counties this year will be 50,000 to 60,000 gallons."

COCONUT growing is becoming an important industry in Florida. Charles Maloney has a plantation of several thousand trees on Stock Island; J. V. Harris of Key West, has about 7,000 trees; E. O. Lock about 10,000; and Lieutenant-Governor Bethel is having an extensive grove of coconut trees planted."

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The California papers, speaking of the possibility of shipping fruit to New York, say the net profits upon a car of peaches, holding 400 crates, is \$800, when they arrive in good condition, the cost of the fruit being \$900, freight, \$1,100, allowing \$100 for spoiled fruit. Peaches will sell readily at 86 per crate. All the plums now in market are from California, and nine-tenths of the pears. The business of sending California plums and pears to London is growing rapidly, there being but little danger of spoiling in transit. A box of pears is worth \$8 in London. Though the fruit is only 50 cents a box, our merchants do not send the fruit to England, but sell to English shippers in need of freight for the other side."

At a ranch where grapes are grown for raisins, and for shipment East, the process is as follows: Around a long, narrow table some 15 Mongolians are seated, busily engaged cutting the poor and withered grapes from each bunch. The fruit is then handed to the packers, several in number, who place them in small boxes, four of which fill a crate. Each bunch will average in weight five pounds. The grapes sent East are a beautiful variety of the white grape, known as the Tokay variety. They are large and firm and possess a delicious flavor. As the flesh is hard and comparatively dry, they will keep well, and are successfully shipped East, as fast freight, if properly packed. The crates and boxes are made especially for long distance shipping purposes and possess many ingenious features. To ship grapes East by fast freight from Sacramento to Chicago costs nearly \$1,000 per car, yet in spite of this enormous expense, added to the cost of raising, picking and packing the fruit, the venture is found to be exceedingly profitable. During the busy season Mr. Blowers ships East on an average nearly a car load of fruit a day. The grapes are transported to Chicago without delay, the cars as far as Omaha are attached to regular

## NEW ADVERTISEMENTS. NEW ADVERTISEMENTS

**\$80,000 WORTH OF FURNITURE.**  
To the People of Michigan:  
We would announce that we have stocked our Mammoth Warerooms with the largest and most varied and best made stock of Furniture ever displayed in the State. You can make your selections in furnishing your hotel, house, room, or office from 100 parlor suits in all materials of coverings, \$30 a suite; 200 bedroom suits, each suite with three pieces, from \$20 a suite, 300 wood and marble top center tables from \$5; sideboards from \$15; book cases from \$18; bureaus from \$57; washstands from \$15; stands from \$12; spring beds from \$10; mattresses from \$10; pillows, 6 lb., \$1.50 each; lounges from \$5; looking glasses from \$5; cane, wood and rattan rockers and chairs at factory prices; 75 cottage painted suits from \$25 a suite, all colors.  
We can give you a 4 bedstead, bureau, washstand, stand, cane rocker, 2 cane chairs, one spring bed, 1 mattress, 3 feather pillows and comforters for \$30, and can furnish a house of 5 rooms for \$50. We make no charges for packing or delivering goods at depots here. All can save themselves their expenses by coming to Detroit on a purchase of \$25, besides selecting from the largest stock in the State. Call and examine for yourselves, and you will be convinced we were never undersold and don't ever intend to be.

## DUDLEY & FOWLE,

Nearly opposite Michigan Exchange, 125, 127 & 129 Jeff. Ave., Detroit.

It is manifest that from GOOD SEEDS ONLY can Good Vegetables be obtained. The character of LANDRETH'S SEEDS has been substantiated by all who have used them. They are the STANDARD for Quality. Over 1,000 acres in Garden Seed Crops under our own cultivation. Ask your Storekeeper for them in original packages, and send a postal card for prices and catalogue. Wholesale trade prices to dealers on application. Founded 1784. DAVID LANDRETH & SONS, 21 and 23 S. Sixth St., Philadelphia.

overland train. The waste grapes are sold to the winery at this place, where they are utilized in making vinegar. Altogether the enterprise is a very extensive one. A large number of hands are employed, and a great deal of money is brought into this country from abroad.

## Apianian.

**Bee-keepers' Convention.**  
The Western Michigan Bee-keepers' Association will meet at Berlin, Ottawa County, Mich., Thursday, Oct. 27th, 1881, in Huntley's hall, at 10:30 A. M. and 2 P. M. All are cordially invited to participate.  
WM. M. S. DODGE, Sec'y., Coopersville, Ottawa Co., Mich.

**Prevent Dysentery.**  
The British Bee Journal says: "This is the winter scourge of dilatory beekeepers and those who will not adopt the advanced principles that experience has proved to be sound and correct. Dryness of the hive is of the first importance during the winter. When breeding is going on, a moist atmosphere is essential, but in winter moisture condenses on the combs, and on the parts of the hive farthest from the bees it thins the unsealed honey and causes it to ferment, and such food being taken by the bees ferments in their bodies, causing abdominal distention and dysentery, which, from our experience, generally develops into foul brood. To prevent this calamity, all stocks that require feeding should be fed sufficiently early to enable the bees to evaporate the superfluous watery particles from the food they have put in their cells, and to seal it over that it may not be influenced by the hive's atmosphere. The frames should be covered with porous material, the quilt or chaff-cushions being all that is necessary. They should lie within an inch of the tops of the frames, leaving only space enough for the bees to pass over the top bars from one comb to another, and should be of sufficient thickness to retain heat, yet sufficiently porous to permit the passage of the vapors generated by the bees. They should be covered by a waterproof roof, yet the free passage of air should be permitted between it and the top of the packing, that the vapors from the bees may be carried away. The chief present duty, however, is to feed the bees that are needy in such a way that they can seal over the food before the cold weather sets in."







has been pur-  
chased in the  
market for \$300.  
The farmer has  
been told that  
the price of the  
land is \$100 per  
acre.

Co's mill at  
the foot of the  
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been told that  
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A three days soldiers' reunion was held at  
Lafayette, Ind., last week. It closed with a  
grand battle, in which 500 old veterans took  
part, and was witnessed by 30,000 people.

On Tuesday night of last week the roadbed  
and track near Montpelier, Ind., went down  
seven feet. The passengers and express goods  
had to be transferred to the morning trains.

Poster was elected governor of Ohio last  
week by a plurality of about 24,000. The house  
will stand 70 Republicans to 35 Democrats,  
and the Senate 25 Republicans to 11 Demo-  
crats.

Wm. L. Taylor and J. D. Daffet, of Ham-  
phreys County, Tenn., and Newton H. McRae,  
of Benton, arrested for making counterfeit  
gold. Detectives are after other members  
of the gang.

The revolutionists Harrison, Whittle, Mc-  
Gonahan, Bliss and Hammond will all work  
in Chicago the coming winter, and they will  
be putting their work in just where it will do  
the most good.

John Levi Robbins died last week in  
Copenhagen, Lewis Co., N. Y., aged 101 years  
and five months. His age is authenticated  
by the records of Stamford, Mass., where  
he was born. He was the seventh of sixteen  
children.

Two men connected with the New Orleans  
police, named Devereaux and Hennessy, had  
a quarrel in the street in that city on Thurs-  
day last, and began shooting at each other.  
Devereaux was killed and Hennessy mortally  
wounded.

George H. Bethard, who claims to be a  
lawyer and a former member of Garfield's  
cabinet in the army, was arrested in  
Washington Friday, for trying to shoot  
Garfield while the latter was being arraigned  
in open court.

The fund for the erection of a monument  
to President Garfield has reached \$9,142. The  
amount is expected to reach \$20,000, of  
which the city of Cleveland, where the  
monument is to be erected, is expected to  
contribute \$50,000.

Rev. Dr. Thomas, who has been convicted  
of heresy by the Rock River Conference of the  
M. E. Church, will appeal his case to the ju-  
dicial Conference of that church, which meets  
in December next. He says he will continue  
to preach as usual.

St. Julien and Trickett trotted a match race  
over the Fleetwood track, at New York, on  
Saturday. St. Julien won in three straight  
heats, time, 2:15, 2:17, and 2:16. The  
same horses will trot at Morrisania, N. Y., for  
a purse of \$5,000.

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THE experiment of carrying mutton and  
beef from South America to France, pre-  
served by means of artificially dried and  
cooled air, was successful, in so far that  
the possibility of carrying the meat with-  
out deterioration was proved. But for  
some reason the trade, thus demonstrated  
to be possible, has not grown, probably  
because South American meat is very poor  
stuff at the best of it. The Colonists in  
Australia and New Zealand are about to  
try the same experiment. In the Frigori-  
ferique power of the vessel's engines  
was used to make the ice with which the air  
was dried and cooled. Of course, it is at  
present impossible to carry on a paying  
dead meat trade between England and  
Australia by means of steamers, because  
steam vessels of the very best construction  
have no power to spare to work refrigera-  
tors, and can barely carry enough of coal  
to take them to their journey's end. But  
as an experiment several cargoes of Aus-  
tralian meat have lately been brought on  
steamers to London, where it met with a  
ready sale. The vessels have also taken  
salmon and other fish to Melbourne. The  
possibility of the business having thus  
been demonstrated, the attempt is now to  
be made to bring over the meat in sailing  
ships.—Toronto Globe.

Unhealthy or inactive kidneys cause gravel,  
Bright's disease, rheumatism, and a host of  
other serious and fatal diseases, which can be  
prevented with Top Bitters, if taken in time.

MADE from harmless materials, and adapted  
to the needs of fading and falling hair,  
Parker's Hair Balsam has taken the first rank  
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We have for this Fall and Winter a remarkably large, elegantly made and  
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**HANDSOME CLOTHING,**  
FOR

**MEN, BOYS AND CHILDREN**  
which, with our choice goods in

**Hats, Caps and Men's Furnishings,**  
—WE ARE OFFERING AT—

**VERY LOW PRICES!**

It is to Your Interest to see us before making  
your purchases of Goods in our Lines, for Fall and  
Winter Wear.

**EVERY DEPARTMENT FULL**  
OF FRESH NEW GOODS.

**J. L. HUDSON, Clothier,**  
Detroit Opera House Building,

**Abbot & Ketchum**  
ARE OPENING AT THEIR NEW STORES

141, 143 and 145 Woodward Avenue,  
A VERY HANDSOME STOCK OF

**DRY GOODS, FANCY GOODS**  
FURS, MILLINERY, CARPETS,

**Upholstery, Cloaks, Etc.,**  
FALL SEASON, 1881.

We have opened up the present season with the  
finest line of goods ever brought to Detroit and  
largely of our own importation. Silks, Plushes and  
Broadels, Fine Dress Goods and Rich Costumes,  
in our Millinery Department we are showing the  
newest fashions in hats and bonnets, suitable for all  
occasions, and cheaply by us from the leading es-  
tablishments at home and abroad.

We have opened a new Department for the sale  
of FURS and can supply anything in this line.  
OUR CARPET DEPARTMENT contains every-  
thing new and choice in Fine Goods, and especial  
attention has been given to the selection of Taste-  
ful and Artistic designs in medium grades to supply  
the demand for cheap goods at p-polar prices.

IN UPHOLSTERY we have the newest things in  
crystal glass, and Furniture coverings: Antiques,  
Guilts, and Nottingham lace Curtains, Window  
Shades, Pictures, Cornices, Poles, Etc.

Samples Sent and Mail Orders Solicited.

190 to 198 Woodward Ave.,  
DETROIT, MICH.

**PUBLIC SALE**  
—OF—  
**SHORTHORN CATTLE.**

—AT—  
**GLEN FLORA, WAUKEGAN, ILLS.,**  
—ON—  
**THURSDAY, NOV. 10th.**

**THE CANADA WEST**  
**Farm - Stock Association**  
Will offer For Sale from the

**BOW PARK HERD,**  
**33 Females & 7 Bulls,**  
Being a very choice selection from their best fam-  
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vited to the sale.

**OXFORD, KIRKLEVENINGTON,**  
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**WATERLOO, HAAT,**  
**MOSS ROSE,**  
**ROAN DUCHES, ROSE OF SHARON**  
**LADY HUDSON, GODNESS,**  
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**THE Cattle are at Glen Flora.**  
Catalogues now ready.  
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**HOLLY and DEMAS**  
**BRACKET SAWS**  
Children's Educational and Money-Makers.  
Holly Bracket Saw \$5, Demas Bracket Saw and Lathe \$3.  
We guarantee either of these machines to give better  
satisfaction than anything heretofore offered. Boys can  
make more money than any other class of work at  
one thousand dollars

in price, ranging from \$25 to \$200, are offered for the  
best to be done, but the majority  
favored the planting of American vines, which  
are supposed to be immune from the pest.

Police returns of agrarian outrages in Ire-  
land for September shows that there were two  
murders, four attempts to murder, 15 aggra-  
vated assaults, 34 incendiary cases and 32  
cases of intimidation, besides numerous cases  
of cattle maiming, injuries to property, etc.  
One man in Kentur was arrested for putting  
needles into potatoes to be fed to the cattle of  
a boycotted farmer.

The French are having a hard time of it  
in Algeria. Their advance on Kirwan has been  
delayed by the failure of the Arabs to  
their railroad communication, and the Arabs  
managed to burn two of the stations. The  
French in Tunis are mounting heavy siege  
operations, and preparing for an attack.  
An detachment of 5,000 French troops fell into  
an ambush near Suffer, and were compelled to  
retreat after suffering severe loss.

THE next issue of the FARMER will  
contain the complete official premium list  
of the State Agricultural Society.

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